Math Vocabulary Hacks

November 1, 2018
NCCTM

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Good Morning!

APPELLNTLY...

VOCABULARY DOES MAKE A DIFFERENCE.

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Talking Points

● Why is vocabulary important?
  ○ Research & Statistics
● Vocabulary strategies/hacks for the math classroom
“Word Poverty”

- Vocabulary is an accurate predictor of academic achievement and even upward mobility over the course of a lifetime (Hirsch, 2013).
- We do not want our students to suffer from “Word Poverty”
  - All content area and grade level teachers need to provide enriched environments and implement a variety strategies to immerse all students in words (Sprenger, 2017).
  - At-risk students, including low SES and ELLs, have a particular need to learn words in ways that meet their specific learning requirements (Sprenger, 2017).
“Teaching specific terms in a specific way is probably the strongest action a teacher can take to ensure that students have the academic background knowledge they need to understand the content they will encounter in school,” (Marzano & Pickering, 2007).
Why does vocabulary instruction have such a profound effect on the comprehension of academic content?

Knowledge of any topic is encapsulated in the terms that people know that are relevant to the topic. The more you understand these terms, the easier it is to understand information you read or hear about the topic (Marzano & Pickering, 2007).

Battle Royale, skins, the floss, aimbots, overlays, nerfed, buffed, tagged, bands....
Vocabulary Strategies/Hacks

Most words need to be processed multiple times and in various ways to make them “stick” and stay in long-term memory (Sprenger, 2017).

- SWAT
- Roll the Dice Vocabulary Challenge
- Which Word Doesn’t Belong? (WWDB) - Game template
- Card Sort/Word Sort
<table>
<thead>
<tr>
<th>Linear</th>
<th>Quadratic</th>
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</thead>
<tbody>
<tr>
<td>Exponential</td>
<td>Not a Function</td>
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**Sample Questions**
\[ y = -\frac{1}{2} x + 4 \]
The value of a new car depreciates at a rate of 15% per year. If the car cost $22,000 new, how much will it be worth after 4 years?
SWAT Ex. 3
Roll the Dice Vocabulary Challenge

- Each team member is assigned a number (1 - 4).
- Team member #1 - pick a vocabulary word from the list provided.
- Next, #1 will roll the die and perform the challenge according to the number rolled (see picture →).
- When the group is satisfied that #1 has successfully completed the challenge, cross out that word and move to team member #2.
- Then #2 will pick a different vocabulary word, roll the die, perform the challenge, etc.
- Team members will continue taking turns to complete the dice challenges to review vocabulary until time is called.
- If needed....your shoulder partner can be your “coach” to help you complete the challenge by using the master vocabulary list.
<table>
<thead>
<tr>
<th>fraction</th>
<th>ratio</th>
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<tbody>
<tr>
<td>percent</td>
<td>rate</td>
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</table>
Card Sort/Word Sort

Math Vocabulary Hacks - Geometry
by Lisa Neal  Created by you

Sort each card into groups or categories based upon what they have in common. Then give each group/category a title. You will be expected to explain/justify your categories and groups.

Circle

Base area
Length

Volume
Radius

Height
Rectangle

Area

Circumference

Slant height

Width

Lateral area

Surface Area

Trapezoid

Perimeter

Triangle
Additional Vocabulary Activities

- **Word Wall Activities** – How can I get my students to interact with math vocabulary?

- **10 Principles for Effective Vocabulary Instruction**
THANK YOU !!!

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References

